

# Meeting Summary Restoration Advisory Board Naval Training Center (NTC), Orlando September 16, 1998

A meeting of the NTC, Orlando Restoration Advisory Board (RAB) was held on September 16, 1998 in the City Commission Chambers, Winter Park City Hall. Attached to this meeting summary are:

Attachment A: Meeting Agenda

Attachment B: RAB Member Sign-in Sheet Attachment C: 1998 RAB Attendance Record

Attachment D: Base Realignment and Closure (BRAC) Update

(Information Repository copy only)

Attachment E: NTC Orlando OU4 handout

(Information Repository copy only)

Attachment F: Community Mailing List Notice

Attachment G: Community Sign-In Sheet

### RAB members present at the meeting were:

Penny Flegler
Don Fuller
Tom Nelson
Edwin Granberry
Blanche Olson
David Grabka
Wayne Hansel
Bruce Hossifield
Phillip Jaffe
Bob Mackey
Nancy Rodriguez
Robert Underwood
Lt. Gary Whipple
Ann Williams

Other Navy and support personnel present at the meeting included:

Rick Allen, Harding Lawson Associates (HLA)

John Kaiser, HLA

Mark Salvetti, HLA

Susan Carroll, Tetra Tech NUS

Steve McCoy, Tetra Tech NUS

#### Welcome

Navy RAB Co-Chair Lt. Whipple opened the meeting at 7:06. He welcomed the RAB and others in attendance, and reviewed the agenda. A quorum of community members was present. H. Beers and K. Yeuell were noted as excused. One member of the public was also in attendance. Co-Chair Whipple invited members of the public to sign in and join the NTC community mailing list.

#### **RAB News**

None

### **RAB Administration and Comments**

July RAB Meeting Summary: The July meeting summary was approved without comment.

Upcoming Meeting Schedule: The next RAB meeting was scheduled for November 18, 1998 at 7 p.m. in the Winter Park City Commission Chambers. Lt. Whipple asked the members for special topic suggestions for the November meeting.

### **BRAC Update/Upcoming Activities**

Wayne Hansel provided an update on ongoing and upcoming environmental activities at NTC. His full report is summarized in Attachment D. New information since Mr. Hansel's July meeting report is presented below:

Operable Unit (OU) 2 - wells were installed, receiving analytical results for groundwater and surface water/sediment. Preparation of the draft RI report has begun and expected to be complete by end of November 1998. Risk evaluation for the golf course is in review, final possibly this month.

Main Base, Operable Unit (OU) 3 (Recruit Training Area) - The draft Remedial Investigation (RI) report is being reviewed by the Orlando Partnering Team (OPT). Preparing to begin the Feasibility Study (FS) by evaluating options for cleanup.

Herndon Annex - Notice to proceed was issued for installation of two additional monitoring wells and to sample and collect water level measurements at all wells at SA 2 (the Septic Tank/Leach Field).

McCoy Annex Sites - Results from groundwater sampling at SA 52 (a former research laboratory) show a substantial decrease and then rebound in pesticide contaminants. Final Remedial Action report issued for SA 23 (the Old Football Field) and SA 40. Waiting on analysis for sampling in mid-July at SA 17 (Training Material Storage area).

Screening Sites - Draft site screening report on soil sampling at SA 54 (McCoy Annex Background Soil Sample Location) is being prepared. SA 54 is located north of the golf course.

### Petroleum Tank Program -

- a Remedial Action Report for Building 7174 (the Kwik Shop Gas Station, McCoy Annex), a follow-up to recent removal of contaminated soil and storage tanks, is being prepared and is scheduled for submittal in September.
- final groundwater sampling at Building 200 (Main Base Fire Fighting School) completed in July, lab analytical results are pending. A report on the sampling results is expected in August.
- FDEP granted NFA for Building 218 (Main Base Recruit Training Command) site on 8/26/98. The wells were pulled. No groundwater restrictions for this site, clean for two quarters.
- a SAR requesting NFA for petroleum constituents and recommending additional assessment for the chlorinated solvents will be submitted for Building 7182 (McCoy Annex Housing Office). Pilot test to be performed at Building 7125 (McCoy Annex Bachelors Enlisted Quarters and Material Storage).
- a Remedial Action Plan for groundwater contamination at Building 7241 (McCoy Annex Roller Rink) was submitted to FDEP and approved on 8/22/98. Plan proposes removal of groundwater containing suspended petroleum (known as free product) and any associated contaminated soil, and then site monitoring in accordance with FDEP regulations. The removal will combine soil excavation with a dewatering process. Environmental Detachment Charleston will perform this work.
- free product being removed from groundwater monitoring wells and piezometers (another instrument used to collect groundwater data) at Buildings 2426 (Main Base Bachelors Officers Quarters), 7171 (McCoy Annex Army Motor Transportation area), and 7241 (McCoy Annex Roller Rink). Remediation go ahead tanks removals to start in Jan or Feb 99.

- no further action recommendation approved for Building 354 (Nuclear Field "A" School).
- **actions at five sites (Buildings 129, 246, 2273, 7171, and 7175) are on hold.**

Property Transfers - parks parcel at McCoy Annex transferred to the Department of Interior in June 1998; Main Base and Parts of McCoy Annex (EDC) 1100 Acres to City of Orlando

Transfer Reports - New additions to the NTC Information Repository in the Orange County Library, 101 East Central Boulevard, Orlando, are:

- Final Tank Management Plan; April 1998
- Draft addendum No. 1 South Main Base FOST and EBST;, July 1998
- Draft addendum No. 1 North Main Base FOST and EBST; July 1998
- Draft FOST and EBST Buildings 7150, 7151, and 7153; July 1998
- Final Screening reports Study Areas 27, 30, and 33; July 1998

## RAB Comments and Questions on the BRAC Update (paraphrased)

The RAB members had no comments or questions.

Lt. Whipple introduced David Grabka from FDEP.

#### Special Topic: OU4 Laundry Facility

Mark Salvetti, Harding Lawson Associates (HLA) updated the RAB on the Remedial Investigation Summary and Feasibility Study Introduction for NTC Orlando OU4. The presentation material is included as Attachment E. Key points of the presentation included:

- Summary of Risk for Surface Soil, Subsurface Soil, Surface Water, Sediment, and Groundwater
- Feasibility Study Considerations for Surface Soil, Groundwater, and Surface Water
- Preliminary Outline
- Status of Draft Remedial Investigation

- Draft Feasibility Study due to be issued in December 1998
- Evaluate options and recommend technologies
- Chemical oxidation pilot study design is currently underway

### RAB Comments and Questions on the Focused Risk Assessment Presentation (paraphrased)

Are Pumps still running? Yes, UBB1 has some problems, UBB2 is working fine.

How often are you checking the pumps? System is checked daily, if they are pulling in sand then the sand is cleaned out. More filters are needed to stop the sand from being pulled in.

### Other RAB Comments and Questions (paraphrased)

Status on Area C Partitioning? On hold, No FOST until the whole thing is ready for transfer.

When will that be? Late 1999 or 2000, Draft FS in the spring of 1999.

Co-Chair Whipple concluded the business portion of the meeting and then. The meeting was opened to community questions.

#### **Community Questions and Comments (paraphrased)**

No community questions were forthcoming, and Lt. Whipple adjourned the meeting at 8:40.

## **AGENDA**

## NTC, Orlando Restoration Advisory Board Meeting September 16, 1998, 7:00 p.m.

Welcome/Opening Comments

Navy Co-Chair Lt. Gary Whipple

RAB Administration And New Business **RAB Co-Chairs** 

**BRAC** Update

Wayne Hansel,

**BRAC Environmental Coordinator** 

Feedback on July meeting:

**RAB Members** 

 Update on studies at Main Base and McCoy Annex golf courses

Close RAB Business

Community Comments and Questions

Notes:

| Esint name alegaly |
|--------------------|
| Print name clearly |
| THOMAS C. NELSON   |
| ROBERT UNDERWARD   |
| Phillip a. Joffe   |
| Bob Mackey         |
| Nancy Maloney      |
| Blanche Olson      |
| WAYNEHAUSEC        |
| Mancy Rodrigues    |
| it S.B. whipple    |
| Edus P. Gusbuy Ch. |
| Duny Freger        |
| Son Williams       |
| Dwell Grabba       |
| BRUCE HOSSFIELD    |
|                    |
|                    |
|                    |

## Attachment C - 1998 RAB Attendance

| RAB Member Name   | JAN  | FEB | MAR  | APR | MAY      | JUNE | T    | Taus |            | T           |     | T            |
|---|------|-----|------|-----|----------|------|------|------|------------|-------------|-----|--------------|
| H. Beers-Community  | X    | 120 | X    | AFN | exc.     | JONE | JULY | AUG  | SEPT       | ОСТ         | NOV | DEC          |
| P. Felger-Community   | exc. |     | X    |     | X        |      | X    |      | exc.       |             |     | ļ            |
| D. Fuller-Community   | exc. |     |      |     | ×        |      | exc. | -    | X          |             |     |              |
| E. Granberry-Community  | X    |     | exc. |     | ×        |      | X    |      | X          |             |     | <del> </del> |
| W. Hansel-U.S. Navy, Southern Division                          | ×    |     | X    |     | ×        |      | ×    |      | X          |             | -   |              |
| B. Hossfield-City of Orlando                                    | x    |     | X    |     | <u> </u> |      | exc. |      | X<br>X     |             |     |              |
| P. Jaffe-Community  | х    |     | Х    |     |          |      | X    |      | _ ^<br>_ X |             |     |              |
| E. Jones-Community  | exc. |     | Х    |     |          |      |      |      | ^          |             |     |              |
| R. Mackey-Community   | ×    |     | х    |     | exc.     |      | X    |      | х          |             |     |              |
| N. Maloney-Community  | ×    |     | х    |     | Х        |      | X    |      | ^<br>x     |             |     |              |
| J. Mitchell-FL Dept. of Env. Protection                         | X    |     | х    |     | X        |      | X    |      |            |             |     |              |
| D. Grabka-FL Dept. of Env. Protection                           |      |     |      |     |          |      |      |      | ×          |             |     | <del></del>  |
| T. Nelson-Community   | ×    |     | exc. |     | х        |      | х    |      | ×          |             |     |              |
| B. Olson-Community  | ×    |     | ×    |     | х        | 1    | x    |      | ×          |             |     | 4.           |
| N. Rodriguez-U.S. Env. Protection Agency                        | ×    |     | х    |     | x        | ·    | x ·  |      | ×          |             |     |              |
| R. Underwood-Community  | exc. |     | х    |     | х        |      | exc. |      | ×          |             |     | :            |
| Lt. Gary Whipple-NTC Orlando Public Works                       | x    |     | х    |     | х        |      | х    |      | ×          |             |     | <del></del>  |
| Ann Williams-Community  | х    |     | ×    |     | ×        |      | ×    |      | X          |             |     |              |
| G. Wojeck-Community   |      |     |      |     | х        |      | ×    |      | -^-        |             |     |              |
| K. Yeuell-Community   | x    |     | x    |     | X        |      | x    |      | exc.       |             |     |              |
| T. Yast-Community   | х    |     | x    |     | x        |      |      |      |            | <del></del> |     |              |
| X = attended meeting<br>exc. = excused absence<br>revised 08/98 |      |     |      |     |          |      |      | :    |            |             |     |              |

## Attachment D

(Information Repository Copy only)

## IR UPDATE AND STATUS September 1998

#### **OPERABLE UNITS**

OU 2: Tetra Tech is currently receiving analytical results for groundwater and surface water/sediment samples. Gross alpha analyses of 4 of the first 7 environmental groundwater samples exceed the screening level (15 pCi/l). Despite using "low flow" methods, the samples were very turbid and it is believed that the solids are causing the high radiological levels.

Upon determining a cost-effective method of disposing of the water (which is not contaminated), a pump test will be performed during the week of October 5, 1998. Preparation of the draft RI report has begun and is expected to be completed by the end of November 1998.

OU 3: The (Draft) RI report is being reviewed by the OPT. HLA is awaiting comments from EPA and FDEP on the report. As requested by the OPT, preliminary technologies appropriate to address soil and groundwater contamination at the OU have been identified and discussed with the Navy's technical review team. The results of this discussion were at the August OPT meeting. The draft FS report for OU 3 is due in late November; FS activities will ramp up in September. The Navy requested that HLA prepare a letter describing areas that would benefit from a soil removal by the Environmental Detachment Charleston. HLA will consider removals in the "hot" soil within the fenced enclosure at Study Area 8 and the drainage swale in Study Area 9 (Figure 4-1 of the draft RI report).

OU 4 IRA (August 1998): Both recirculation wells have operated continuously during the month of August except for scheduled down time for maintenance activities. UVB-1 has exhibited significantly reduced groundwater recirculation rates due to accumulation of sediment in the submersible pump and fine sand in the lower well screen area. Maintenance service trips were made to the site the week of August 10 and the week of August 17 to remedy these problems. UVB-1 continues to operate at a reduced pumping rate and will do so until the current effluent pumping system can be modified. UVB-2 has operated without problem at approximately 7.5 gpm recirculation rate. Bechtel has reviewed SBP's initial design submittal for the proposed system modifications to address the low recirculation rates and the influent/effluent flow balancing problem. The final design is to be submitted to Bechtel the week of September 7.

Groundwater samples to evaluate IRA performance were last collected on August 18. The 3 downgradient monitoring points adjacent to and within the lake continue to show decreases in total VOCs. This data will be presented at the September OPT meeting. The next round of groundwater sampling for the IRA is scheduled for the week of September 28.

OU 4 RI/FS: The OU 4 RI report was issued on 9/4/98.

As was briefly discussed at the August OPT, HLA is preparing for a potassium permanganate pilot study at OU4. Groundwater will be extracted from downgradient of the source area north of

the surge tank, treated with potassium permanganate, and then reinjected upgradient. The permanganate should oxidize the VOCs in-situ. HLA is collecting engineering and cost data while awaiting the results of HLA's submittal to the Naval Facilities Engineering Service Center for innovative technology development funds. Word is expected by mid-September. The full scope of the pilot study will be dependent on the amount of funding available.

Further efforts to air sparge the OU4 source area will not be pursued. The results of the abbreviated air sparging pilot will be provided to the OPT in the form of a letter report. This is expected to be issued before the October OPT meeting.

The preparation of the OU4 Feasibility Study has begun with some preliminary screening of remedial technologies. A summary of the technologies under consideration for all OU4 media and contaminants will be presented at the October OPT meeting.

#### **GROUPS IV AND V:**

SA 35: Soil removal to be conducted by Environmental Detachment Charleston (DET). IRA Workplan with HLA recommendations for soil removal will be issued in mid-September.

SA 36: OPT recommended installation of three additional wells, followed by groundwater sampling of new wells and eight existing wells for volatiles and natural attenuation parameters. HLA has recently received notice to proceed.

SA 37: Soil removal to be conducted by DET; well installation to follow soil removal. IRA Workplan with HLA recommendations for soil removal will be issued in mid-September.

SA 42: Soil removal to be conducted by DET.

#### OTHER STUDY AREAS:

SA 2: HLA has received notice to proceed to install two additional wells, sample all wells (21) for volatiles and natural attenuation parameters, collect water level measurements all wells and piezometers. HLA has prepared drilling specifications and will solicit bids next week. Survey and laboratory specifications are in preparation.

SA 3: Seventh round of quarterly monitoring took place 8/26/98. During the last sampling in May, PCE concentrations in both wells (OLD-03-01 and OLD-03-04) were 2.1 and 2.7 mg/l, versus the MCL of 3 mg/l. Results are not yet available.

SA 17: Field investigation completed in mid-July. Data analysis and report preparation in progress.

SAs 23 & 40: Completed and issued the FRA reports on 5/18/98. IRA Workplan with HLA recommendations for soil removal will be issued in mid-September

SA 39: IRA Workplan with HLA recommendations for soil removal will be issued in mid-September.

SA 52: Third round of sampling in well OLD-52-13 (dieldrin exceedance) occurred on 5/1/98. Fourth round of quarterly monitoring conducted 9/12/98. Results thusfar in well OLD-52-13 (FDEP Groundwater Guidance Concentration for dieldrin is 0.1 mg/l and the new FDEP Groundwater Cleanup Target Level is 0.005 mg/l):

10/97 5.6 mg/l dieldrin 02/98 0.20 mg/l dieldrin 05/98 0.31 mg/l dieldrin

SA 54: Draft site screening report on the two background surface soil sample locations (ORS00901 and ORS01601) in progress.

SA 55: Activities proposed in letter workplan were conducted in early August. Immunoassay results indicate no PCBs above detection levels in surface soil sampled from site. Awaiting results from offsite laboratory for wipe samples, surface soil samples and groundwater sample.

#### STUDY AREA STATUS:

55 study areas have been screened1

- ⇒ 37½ SAs have been submitted as final and approved for NFA: 1, 3, 4, 5, 6, 7, 8[WWTP], 10, 11, 15, 16, 19, 20, 21, 22, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 38, 41, 43, 44, 45, 46, 47, 48, 49, 50, 51, and 53
- $\Rightarrow$  7 SA reports required (2, 17, 18, 39, 40, 52, and 54)
- $\Rightarrow$  4½ SAs became OUs (8 [greenskeeper storage] & 9 [OU3]; and 12, 13, and 14 [OU4]
- ⇒ 4 SAs require removal actions and/or additional screening (23, 35, 36, 37).
- ⇒ 1 SA report issued final draft at June OPT meeting (42, HLA recommends limited soil removal)
- ⇒ SA 55, Bldg 1104, (alleged PCB storage facility), field work completed, awaiting laboratory results.

includes SA 54 (background surface soil locations S009 and S016), and SA 55, Bldg. 1104 (alleged PCB storage)

## UST UPDATE AND STATUS September 1998

Bldg 200: Letter report discussing sample results from the first of two required events was issued on 5/20/98. The last sampling event is scheduled for 6/19/98. Groundwater samples were collected on July 19, 1998 from selected monitoring wells, awaiting laboratory analytical results. A letter report was submitted to FDEP on August 10, 1998 requesting an NFA for the site. The request was denied on 8/24/98 because two consecutive quarterly samples must demonstrate Groundwater Cleanup Target Levels (GCTLs) have been achieved. Wells MW-6 and MW-8 exceeded the GCTL for TRPH and dibenz(a,h)anthracene in the previous sampling event (see FDEP letter dated August 24, 1998).

**Bldg 218:** Fourth quarter MOP sampling completed on 5/28/98. Report will include a recommendation regarding status of the site. The fourth quarter MOP report for Building 218 was submitted to FDEP on 7/20/98 requesting an NFA for the site, which was granted on 8/26/98 by FDEP.

Bldg 369: The SAR was issued 4/27/98 recommending an NFA. FDEP requested additional information regarding soil sampling. The information requested was submitted on 6/3/98. FDEP has not yet provided response to SAR for Building 369.

**Bldg 2036.** First quarter MOP report was submitted to FDEP on 7/3/98. Sampling for the 2nd quarter MOP was conducted on 8/19/98.

Bldg 2273: The City of Orlando's contractor is installing utilities in the area, and HLA has provided oversight for the soil excavation. The site will be dewatered using a well point system and the resulting water will be sampled and, if appropriate, disposed of in the sanitary sewer. It is the City's responsibility to treat any water that does not meet sanitary sewer requirements.

Bldg 2426: The SAR was completed on 5/29/98. FDEP approved recommendations for the excavation of petroleum impacted soil and free-product removal on 7/7/98. Site is on hold awaiting remediation.

Bldg 7125: Soil sampling completed. Well installation scheduled for the week of 6/15/98. Site has some soil contamination. Five monitoring wells were installed and sampled the week of July 13, 1998. Orange County has provided information regarding the "BUGS" remediation. Additional monitoring wells will be installed to complete groundwater plume delineation. Free-floating product was discovered in one monitoring well and in one piezometer. Free-product delineation will be conducted as part of this site assessment.

Bldg 7174: The SAR was issued on 5/5/98 recommending a RAP; FDEP provided comments approving recommendation for RAP 5/26/98. RAP is being prepared and is scheduled for submittal on September 24, 1998.

Bldg 7182: Soil sampling and well installation will take place the week of 6/15/98. Three monitoring wells were installed and sampled on the week of July 6, 1998. Site assessment activities initiated at Building 7182 were completed for the suspected petroleum contamination; however, chlorinated solvents were found at levels above the State of Florida standards. A SAR will be submitted under Chapter 62-770 FAC and will request an NFA for petroleum constituents and recommend additional assessment for the chlorinated solvents. The SAR for the site is under preparation and is scheduled for delivery on 9/17/98.

**Bldg 7241:** The Remedial Action Plan (RAP) for Building 7241 was submitted to FDEP on 8/10/98 and was approved by FDEP on 8/22/98.

Bldgs 129, 2273, 2426, 7171 and 7175: actions are still on hold. A letter dated August 10, 1998 was submitted to LT Whipple requesting authorization to initiate work at the above mentioned sites.

Note: The Navy environmental coordinator is in the process of removing (bailing) free product from wells and piezometers at Buildings 2426, 7171 and 7241.

1997 (FY) SARs have been submitted for the following sites: 129, 354, 369 (NFA), 2426, 7107 (IRA), 7121 (NFA/FDEP concurrence), 7125-A, 7182, 7239 (NFA/FDEP concurrence), and 7241-2 (RAP/FDEP concurrence).

### PROPERTY TRANSFER September 1998

Parks Parcels McCoy Annex (PBC) 75 acres transferred to Department of Interior. We are working on deeds to transfer them to the City of Orlando.

July 98

Main Base and Parts of McCoy Annex (EDC) 1100 Acres to City of Orlando

October 98

## **REPORTS**

| <u>KEPC</u> | <u>ikis</u>  |                |
|-------------|--|----------------|
|             | Project Operations Plan                                      | March 94       |
|             | Environmental Baseline Survey                                | December 94    |
|             | EBS for Transfer, Galley, Building 325                       | January 95     |
|             | Background Sampling Plan                                     | February 95    |
|             | Site Screening Work Plans Group II and III                   | February 95    |
|             | EBS for Lease of Herndon Annex                               | March 95       |
|             | BRAC Cleanup Plan  | March 95       |
|             | EBS for Transfer of Naval Hospital Property to V.A.          | May 95         |
|             | Background Sampling Report                                   | August 95      |
|             | Technical Memorandum U.S. Air Force records Search           | September 95   |
|             | Site Screening Plan Groups I through V Study Areas           | September 95   |
|             | Final Group I Site Screening Report                          | November 1995  |
|             | Draft Site Screening Report Group II                         | November 1995  |
|             | FOSL for Bldg.305  | December 1995  |
|             | Draft Site Screening Report Group III                        | December 1995  |
|             | Base Realignment and Closure                                 |                |
|             | Environmental Site-Screening Report                          | July 1996      |
|             | South RTC FOSL   | October 1996   |
|             | Final OU1 RI/FS Report                                       | January 1997   |
|             | Final OU2 Work Plans   | January 1997   |
| *           | OU2 Focused Feasibility Study                                | February 97    |
|             | OU2 Draft Design   | February 97    |
|             | OU2 Focused Feasibility Study                                | February 97    |
|             | BRAC Business Plan   | March 97       |
|             | Final Site Screening Reports for                             |                |
|             | Study Areas 19, 20, 22, 24, 26, 45, 48,                      | July 97        |
|             | Final ROD for OUI  | November 97    |
|             | Final Work plan for RI/FS Operable Unit 3                    | October 97     |
|             | Final Work plan for RI/FS Operable Unit 4                    | July 97        |
|             | Site Screening Report Study Area 25                          | July 97        |
|             | FOST and EBS for North and Central McCoy Annex               | December 97    |
|             | FOST and EBS for Florida Army Air National Guard McCoy Annex | February 98    |
|             | FOST and EBS for North Main Base and Parts of McCoy Annex    | April 98       |
|             | FOST and EBS for South Main Base                             | April 98       |
|             | Final Tank Management Plan                                   | April 98       |
|             | Draft Addendum No.1 South Main Base FOST and EBST            | July 98        |
|             | Draft Addendum No.1 North Main Base FOST and EBST            | July 98        |
|             | Draft FOST and EBST Buildings 7150, 7151, 7153               | July 98        |
|             | Final Screening reports Study Areas 27, 30, and 33           | <u>July 98</u> |
| То ОРТ      | for review:  |                |
|             | Draft Site Assessment Report Study Area 2                    | April 98       |
|             | Final Draft RI Report OU3                                    | July 98        |
|             | Final Draft RI Report OU4                                    | September 08   |

## Attachment E

(Information Repository Copy only)



# Risk Summary

- Surface Soil
  - -Residential and Occupational Worker Risk Greater Than 1E-06
  - -PAHs and Arsenic Risk Drivers

Subsurface Soil - Within Acceptable

Risk Range

# Risk Summary (cont)

- Surface Water
  - Trespasser, Recreational, and Residential Risk Greater Than 1E-06
  - -VOCs Primary Risk Drivers

Sediment - Within Acceptable Risk

Range

# Risk Summary (cont)

- Groundwater
  - Residential Risk (Inhalation and Ingestion)
  - VOCs and Antimony Primary RiskDrivers

- Feasibility Study Considerations
  - Surface Soil Detachment Removal Actions
  - Groundwater Evaluate VOC and Antimony Technologies
  - Surface Water Addressed by Groundwater Remediation



# Preliminary Outline

- No Action Scenario
- Limited Action
  - Institutional Controls
- Containment
  - -Hydraulic Barrier
  - -Slurry Wall or Sheet Pile



- Treatment (In-Situ)
  - -Air Sparging
  - -Chemical Oxidation
  - -Recirc Wells
  - -Reactive Wall
  - -Surfactant Flushing



- Treatment (In-Situ) (cont)
  - -Steam Stripping
  - Natural Attenuation/Phytoremediation
  - -Enhanced Anaerobic Bio
  - -Fixation (Antimony)



Treatment (Ex-Situ)

Follow Presumptive Remedy Guidance:

- -Air Stripping
- -UV/Oxidation
- -Carbon
- -POTW
- Bioreactor



Treatment (Ex-Situ) (cont)

# For Antimony:

- -Chemical Precipitation
- -lon Exchange
- -Aeration



- Draft Remedial Investigation in review
- Draft Feasibility Study due for issue in December 1998
- Will evaluate the preceding options and recommend technologies
  - Chemical oxidation pilot study design currently underway

## Environmental Meeting - Public Invited

# Restoration Advisory Board Naval Training Center, Orlando

The Naval Training Center's Restoration Advisory Board (RAB) will hold its regular meeting concerning ongoing environmental studies and cleanup at NTC.

When: 7:00 - 9:00 P.M.

Wednesday, September 16, 1998

Where: Winter Park City Hall

City Commission Chamber - second floor 401 Park Avenue South, Winter Park

The current status of all NTC environmental program sites will be presented. An open floor period for community comments or questions will follow the RAB business portion of the meeting.

Documents on the environmental program at NTC, Orlando, including summaries of prior RAB meetings, are available for public review at the Orange County Library, 101 East Central Avenue, Orlando. They are located in the Information Repository in the Social Sciences Department (Aisle 27) on the second floor.

**Need More Information?** 

Call Lt. Gary Whipple at 646-4735

or

Penny Felger at 657-8276

Attachment G

# NAVAL TRAINING CENTER, ORLANDO RESTORATION ADVISORY BOARD MEETING WINTER PARK CITY HALL COMMISSION CHAMBER, September 16, 1998

## COMMUNITY SIGN-IN SHEET (please PRINT clearly)

| NAME ,    | ADDRESS<br>(please include zip code) | TELEPHONE NO.<br>(day/evening) | AFFILIATION<br>(if any)  | Would you like to<br>be added to our<br>mailing list |  |
|-----------|--------------------------------------|--------------------------------|--|--|--|
| Ton Kelly | 6255.11 Mily                         | 8 98712                        |  | Xes.   |  |
|           |                                      |                                | enweltig delle, delle esse la little delle d |  |  |
|           |                                      |                                |  |  |  |
|           |                                      | ·                              |  |  |  |
|           |                                      |                                |  |  |  |
|           |                                      |                                |  |  |  |
|           |                                      |                                |  |  |  |
|           |                                      |                                |  |  |  |